

Joplin, Missouri. February 18, 1929.

Mr. R. T. Cornell, Vice President, Kansas Explorations, Inc., 250 Park Avenue, New York City.

Dear Sir:

I submit herein Annual Report of Kansas Explorations, Inc., for the year 1928.

Respectfully,

40116360



KANSAS EXPLORATIONS, INCORPORATED

JOPLIN, MISSOURI

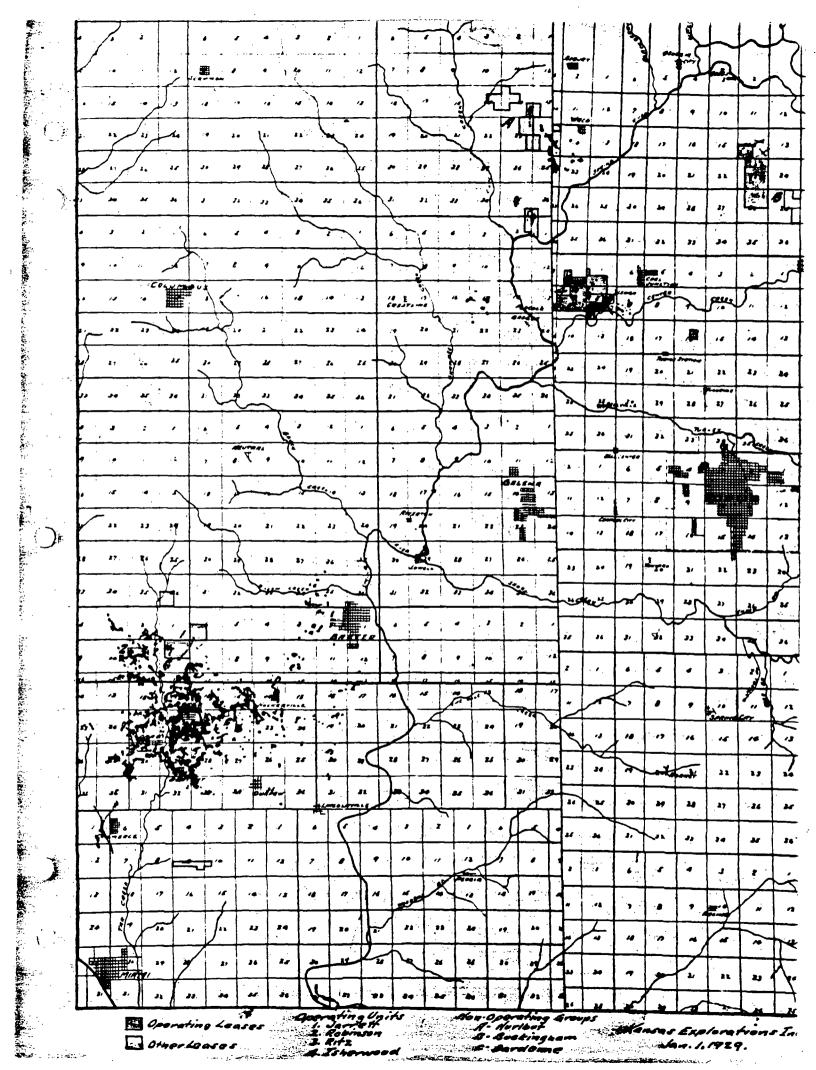
"ANNUAL REPORT"

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KANSAS EXPLORATIONS INC.
JOPLIN, MISSOURI.

ANNUAL REPORT FOR 1928.

Kansas Explorations, Inc. during 1928 operated three properties in the Missouri-Kansas-Oklahoma Zinc-Lead District, prospected several leases not included under those operated, and examined a large number of mines and prospects in the Tri-State District.

The location of the three operating properties, one idle property, and of the leases now held by the Company is shown on the small scale map in the front of this report.

Activity for the year was divided between "Operations" and "Explorations". The practice has been to consider as "operations" all activity on any property which has once been brought to the production stage. All other activity such as drilling, examinations, and mine developments on properties that have not been acquired or brought to the production stage have been considered as "explorations". The cost of churn drilling on "operating" properties is charged direct to "Operations".

During the year 1928

"OPERATIONS"

Production from mines was

183,742 Rock Tons

Production from tailings was

238,468 Rock Tons

Giving a yield of 17,119 Zinc Concentrate Tons

and

947 Lead Concentrate Tons

Our Operating Units, Joplin Accounts, show an operating profit, plus miscellaneous income balance - (this before depreciation, depletion, interest and New York charges) of \$84,916.95.

"EXPLORATIONS"

Exploration work on properties outside of the operating units consisted of 1186 feet of shale drill holes, 9729 feet of deep drill holes, together with incidental lease, legal, rental expense, etc.

Expenditures in such work totaled - \$32,253.22

Miscellaneous Income from other than Operating

Properties totaled - \$731.78

CAPITAL EXPENDITURES

On Operating Properties totaled

\$ 3,381.06

SUMMARIZING

Operating Units - Credit

\$84,916.95

Capital Expenditures (Operating Properties)

\$ 3,381.06

Exploration Work

\$31.521.44

Resulting in Operating Balance (Joplin Accounts)

\$56**,7**76**.**57

\$84,916.95

\$84,916.95

1927 practically brought to a definite conclusion the enormous drilling campaign originally During 1928 drilling was carried on only upon those leases with known ore reserves. At the close of the year holdings of the Company consisted of 8 operating leases comprising 1115.2 acres and 30 non-operating leases comprising 3050.2 acres or a total acreage leased of 4165.4 acres. At the beginning of the year 1928 with the Ritz, Robinson, Isherwood and Jarrett Properties equipped with four large, up to date, concentrating plants, the Company could have produced over 40,000 tons of zinc and lead concentrates during the year, but due to the low zinc market it was considered wise to curtail production severely and maintain ore reserves for the future. During the year 18,066 tons of zinc and lead concentrates were produced. There was blocked during the year 4579 tons zinc and lead concentrates as "Proved" ore, and 11,112 tons of zinc and lead concentrates "Probable" ore were indicated, making a total of 15.691 tons of "Proved" and "Probable" ore found during the year. This gives a total "Proved and Probable" Ore Reserve of 123,172 tons zinc and lead concentrates, as at 12/31/28. Of this total, approximately 13,000 tons would be lead concentrates. Future drilling and development should prove additional ore.

The Joplin ore market at the beginning of 1928 was \$36.00 per ton of zinc concentrates (Base for 60% zinc) and \$85.00 per ton of lead concentrates (Base for 80% lead). During the first five months of the year the average prices were \$37.30 base for zinc and \$78.40 base for lead. The zinc market went to \$40.00 base on 5/19/28 and remained unchanged throughout the year, a period of 33 weeks. During this same period the lead market ranged from \$80.00 to \$85.00 base. Market at the end of the year was \$40.00 Zinc Base and \$85.00 Lead Base.

General comparison of 1928 operations and explorations with the previous years is shown below:

SUMMARY COMPARATIVE RESULTS OF OPERATIONS AND EXPLORATIONS

· .	Period 1921 to 1926 Inc.	Period Year 1927	Period Year 1928	Total at 12/31/28.
ORE RESERVES**				
Rock Tons Mine Ore Tailings	935,963 986,116	2,132,796 901,511	2,149,851 696,200	2,149,851 696,200
Concentrate To	ns 7 4,2 95	125,547	123,172	123,172
ORE PRODUCED	•	•		
Rock Tons	795,163	496,864	422,210	1,714,237
Concentrate To	ns 51,308	29,014	18,066	98,388
CAPITAL EXPENDIT	URES ts) 2,720,659.26	233,431.62	28,872.16	2,982,963.04
OPERATING PROFIT OTHER INCOME (Joplin Account		172,517.15	8 5, 64 8.73	1,046,042.02

Notes: * Includes Sullivan.

Ore Reserves for 1921 to and including 1926 includes "Proved Ore" only - "Probable Ore" not included due to variation in manner of calculation. Ore Reserves for 1927, 1928 and Total Reserves at 12/31/28 includes both "Proved" and "Probable".

OPERATIONS

Kansas Explorations, Inc., operated three units during 1928, as follows:

Lease	Lease Number	Acres		
Robinson Unit - Kansas	· · · ·			
Robinson Lease	724	80		
Ritz Unit - Oklahoma				
Ritz Lease	921	60		
Isherwood Unit - Missouri				
Isherwood Lease Ellis Lease Martin Lease Banta Lease McKee Lease Total Isherwood Unit	603 494 594 586 929* - Five Leases.	79 175 320 81 1.2 656.2		
GRAND TOTAL - 7 Leases	•	796.2		

The following unit remained idle during the year:

Jarrett Unit - Kansas

Lease			L ease Number	Acres
Jarrett		1	396	240
Foley**			3 83	20
Mullen			7 4 3- ▲	160
Total	Jarrett	Unit	- Three Leases.	420

Notes:

^{*} No Production in 1928. * This lease was abandoned during the year.

OPERATIONS

SUMMARY

Production & Recovery

				٠				Concentr	
	Ore	Tonna	g e	Conce	entrat e	Tonnage		Recovery	7 %
Property	Tailings	Hoisted	Milled	Zino	Lead	Total	Zino	Lead.	Total
Jarrett Unit	. 0 .	0	0	22.1	0	22.1	0	0	· O
Robinson Unit	0	100072	96837	6260.8	858.5	7119.3	6.46	.89	7.35
Ritz Unit	238468	0	238473**	4079.1	72.6	4151.7	1.71	.03	1.74
Isherwood Unit	0	83670*	77811	6757.0	15.9	6772.9	8.68	.02	8.70
TOTAL OR AVERAGE	238468	183742	413121	17119,0	947,0	18066.0	4.14	. 23	4.37
Percentages		•••	7.1473	94.8	5.2	100.0			
Percentage Milled			97.8	4					

Notes:- * - Includes 2381 tons from surface dump. ** - All Tailings.

		· ·		
DISTRIBUTION	TO T	CONCENTRATE	RECOVERY	\$

	•	TAILINGS			MINE ORE			AVERAGE		
		Zinc	Lead	Total	Zinc	Lead	Total	Zinc	Lead	Total
Ritz AVERAGE ALL		1.71	.03	1.74	0	0	. 0	1.71	.03	1.74
PROPERTIES		1.71	. 03	1.74	7.47	•50	7.97	4.14	. 23	4.37

OPERATING COSTS - (Total and Rock Ton)

	Mining	(1)	Milli	ng	Miscellar	neous (2)	Churn D	rilling	Tot	al
Property	Amount	Per Ton	Amount P	er Ton				Per Ton	Amount	Per Ton
Jarrett Unit	633.71	0	1239.56	0	8762.24	0	945.25	0	10313.34	0
Robinson Unit	142217.89	1.421	36460.19	.376	24797.33	.256	3007.72	.030	206483.13	2.083
Ritz Unit	218.16	0	91001.15	.381	17159.13	.072	0	0	107942.12	.453
Isherwood Unit Grand Totals	148904,82	1.780	18161.50	.233	24964.67	.321	21272.28	.254	213303.27	2.588
or Averages	290270.84	1.580	146862.40	.356	75683.37	.183	25225.25	.137	538041.86	2.256
÷										

GENERAL	· .	•		OPE	RATI Per	ING BALAN Per Ton	C E Percent
Property	Inventory Increases	Adjusted Costs	Net Sales(3)	Amount	Ton Ore	Concentrates Produced	Operating Cost
Jarrett Unit	10994.75	21308.09	17265.80	4042.29	0	0	39.19
Robinson Unit	7511.00	213994.13	253343.81	39349.68	.554	4.06	19.06
Ritz Unit	12246.22	120188.34	141248.36	21060.02	.088	5.07	19.51
Isherwood Unit Grand Totals	76058.59	289361.86	316487.84	27125.98	.502	4.01	12.78
or Averages	106810.56	644852.42	728345.81	83493.39	.202	4.63	15.52
Notes:- (1)	Includes Ope	erating Devel	lopment; (2) (oss Sales less	General Expe	nses;		

OPERATING DEVELOPMENT - INCLUDED IN ABOVE OPERATING COSTS.

	Jarrett	Robinson	Ritz	Isherwood	Total
Tons Hoisted	0	100072	238468*	83670	422210
Tons Concentrates Produced	22.1	7119.3	4151.7	6772.9	18066.0
Total Development Expense	0	30929.00	55.77	19328.59	50201.82
Cost Per Ton Hoisted	0	.309	0	.231	.273
Cost Per Ton Concentrates Note:- * Tailing	0 .	4.344	0	2.854	2.779

S A L E S - OPERATING BALANCES - (Total Amounts and Per Ton Concentrates)

	Jaı	rett Per	Robin	nson Per	Ri	.tz Per	Isher	wood Per	Tot	al Per
Gross Sales	Amount	Ton Sold	Amount	Ton Sold	Amount	Ton Sold	Amount	Ton Sold	Amount	Ton Sold
Zinc Lead Total	20312.71 0 20312.71	38.91 0 38.91	240023.15 67472.59 307495.74	37.85 79.80 42.79	157037.72 4388.98 161426.70	59.63	370817.50 1142.63 371960.13	71.86	788191.08 73004.20 861195.28	78.08
Royalty	3046.91	5.84	54151.93	7.54	20178.34	4.30	55478.29	6.20	132849.47	6.22
Net Sales	17265.80	33.07	253343.81	35.25	141248.36	30.10	316487.84	1 35.39	728345.81	34.12
Operating Costs Inventories	10313.34		206483.13	28.73	107942.1		213303.27		538041.86	•.
Increase* Adjusted	10994.75	21.06	7511.00		12246.22		76058.59		106810.56	
Costs Operating Balance	21308.09	40.81 7.74	213994.13 39349.68		21060.0		289361.86 87125.98		644852.42 83493.39	• •
Per Ton Produced		182.92		5.53		5.07		4.01		4.63
·	Note:-	* Invento	ries carri	ed at cost	•		A y		•	
Tons Sold			•		*					*
Zinc Lead Total	522.1 0 522.1		6340.8 845.5 7186.3		4619.1 73.6 4692.7	·	8927.0 15.9 8942.9		20409.0 935.0 21344.0	
Tons Invento	ry	•	· · · · · · · · · · · · · · · · · · ·		•					
Zinc Lead Total	0 0 0		1360.0 33.0 1393.0		0 0 0		470.0 0 470.0		1830.0 33.0 1863.0	Page No
					•				•	•

JARRETT UNIT - KANSAS.

The Following is a Summary of Operations at the Jarrett Unit During and at the End of 1928.

	Jarrett	Foley	Mullen	Total Jarrett Unit
Rock Tons Hoisted Rock Tons Milled Zinc Conc. Tons Produced Lead Conc. Tons Produced Total Conc. Tons Produced	i 0			0 0 22.1 0 22.1
Drilling - Footage Development - Footage		783		7 83 0
Ore Reserves End of Year Rock Tons Grade ZnPb. \$ Concentrate Tons	r (Proved p	lus Probab	le) (1)	413943 4.27 21291
Costs - Operating (Shut	Down)			10313.34**
Capital Expenditures During Year (Joplin Accounts) Total at End of Year		53636.32* 0		59026.08 468485.26
Operating Profit & Misc. During Year (Joplin Accounts) Total at End of Year	2557.75	927.49 6237.1 3	557.05 5961.57	4042.29 206305.53
Inventory End of Year (5 Zinc Concentrates Lead Concentrates Total Concentrates	Cons)			0 0 0

Notes:- Bin Adjustment. ** Includes charge

Includes charge for Power Peak Adjustment \$3454.65 and Churn Drilling \$945.25 on Foley; also includes credit of approximately \$2300.00 for Operating Supplies, etc., transferred. No Tonnage.

*** Includes \$53236.32 written off to New York.

⁽¹⁾ Foley eliminated.

JARRETT UNIT - KANSAS

This unit includes the Jarrett, Foley and Mullen leases, an aggregate of 420 acres, the ore from which, by reason of special agreements, can be treated in one mill. The Foley was abandoned during the year.

The Jarrett unit has a modern concentrating mill - capacity 720 tons per 24 hours. Ore is supplied to this mill through the Jarrett #1, #2, #3, Foley #1 and Mullen #1 shafts. This mill was closed down in October 1927, because of adverse ore market conditions and the desire to conserve the ere reserve for better market conditions. This property was idle during 1928.

JARRETT MINE #1

This mine is in fair condition to resume production on short notice.

JARRETT MINE #2

This mine is in excellent condition to produce a large tonnage of good ore very cheaply and all on short notice. Jarrett #2 is an exceptionally good mine.

JARRETT MINE #3

This mine is in excellent condition to produce a fair tonnage on short notice.

FOLEY MINE #1

This mine was abandoned during the year.

MULLEN MINE #1

The future of this mine seems to depend upon the possible development of the deep run of ore, found by churn drilling, below the four hundred foot level.

ROBINSON UNIT - KANSAS.

The Following is a Summary of Operations at the Robinson Unit During and at the End of 1928.

	Robinson Shaft Nos.1-2-3	Robinson Shaft No. 4	Robinson Shaft No. 5	Total Robinson Unit
Rock Tons Hoisted Rock Tons Milled Zinc Conc. Tons Pro Lead Conc. Tons Pro Total Conc. Tons I Zinc Conc. Recovery Lead Conc. Recovery Total Conc. Recovery	oduced oduced Produced y %	71244	2 6757	100072 96837 6260.8 858.5 7119.3 6.46 .89 7.35
Drilling - Footage Development - Foots	age 1028.5	639	166	4732 1833.5
Ore Reserves End of Rock Tons Grade ZnPb. % Concentrate Tons	f Year (Pro	ved plus Pr	obable)	312877 3,72 13876
Efficiency Tons Rock Mined Pe Tons Conc. Mined I				5.1 .36
Costs - Operating Drilling & Dev. Co Total Rock Ton Total Conc. Ton	ost* (Rock !	Fon)		.339 2.083 29.00
Capital Expenditure During Year (Jopli Total at End of Ye	in Accounts)		5169.00 2 89470.72
Operating Profit & During Year (Jopli Total at End of Year	n Accounts	ne (Includi)	ng Inventor	y at Cost) 39752.69 391935.92
Inventory End of Ye Zinc Concentrates Lead Concentrates Total Concentrates		•		1360.0 33.0 1393.0

Note:- * Included in Rock Ton and Concentrate Ton Cost.

ROBINSON UNIT - KANSAS

This unit includes 80 acres, the ores from which can be treated in one mill.

The Robinson has a modern concentrating mill and a complete differential flotation unit. This mill has a capacity of 720 tons per 24 hours. Ore is supplied to this mill from Robinson #1, #2, #3, #4 and #5 shafts, all located on the Robinson 80 acres.

The mill operated one ten-hour shift, continuously during the year with the exception of one week curtailment close-down in May.

The milling practice has been greatly improved during the year without increasing Capital Expenditures. Extraction was raised 3.5% the last six months of the year. Xanthate, the patented reagent used in the Flotation plants of this district was successfully replaced by cheaper reagents at this plant, and at the same time the grade of Flotation Concentrates has been raised from 57% to 60% zinc. Improvement in Flotation practice increased the Flotation Concentrate ton value more than \$2.00 per ton ever 1927 results. A large saving in power was effected in the Flotation plant by reducing the speed of Flotation machines from 200 to 115 revolutions per minute, thereby reducing the horse-power required for each Flotation machine from 8 horse-power to 5½ horse-power.

All Concentration Tables were equipped during the year with St. Joe Pinch Riffles and each linoleum top was replaced with rubber top as needed.

The over-all efficiency of this property was very materially increased the past year - the efficiency obtained in one shift operation nearly approaching that obtained in two shift operations in 1926 and 1927.

ROBINSON MINE #1, 2, 3

These mines are now all connected and all future tonnage will be hoisted through #3 shaft direct into the mill hopper. These mines were practically idle during the year on account of being able to obtain greater efficiency by mining all tonnage from #4 and #5 mines.

During the year a drift was driven several hundred feet to the North from the bottom of a winze sunk about 48' below the old mine workings to ore indicated by surface churn drilling. Later underground drilling indicated similar ore near #3 shaft and on approximately the same elevation as the ore drifted to from the winze. On August 1st we started on the work of deepening #3 shaft 48' deeper and then drifting to the North to connect into the winze. All of this work has come up fully to our expectation and, as originally planned, we hope to develop this area into the cheapest production area yet mined on this property. Production from this area will begin about February of 1929.

ROBINSON MINE #4

This mine furnished over 70% of the years production. A development drift to the South connecting in with the King Brand Mines gave a large tonnage of excellent lead ore which has been practically mined out. During the year every effort was made to extend the extreme Northwest ore toward the indicated ore in the Northwest corner of the lease. The ore has been only in pockets, but reasonable progress, and some profit has been made.

ROBINSON MINE #5

This mine is located in the extreme Northeast corner of the lease. During April a 40° raise was made in the North end of the mine where a good tonnage of high lead ore has been mined. This mine should be completed the first part of 1929.

RITZ UNIT - OKLAHOMA.

The Following is a Summary of Operations at the Ritz Unit During and at the End of 1928.

	Ritz Mine Ore	Ritz Tailings	Total Ritz Unit
Rock & Tailings Tons Hoisted* Rock & Tailings Tons Milled* Zinc Conc. Tons Produced Lead Conc. Tons Produced Total Conc. Tons Produced Zinc Concentrate Recovery % Lead Concentrate Recovery % Total Concentrate Recovery %	0	238468 238473	238468 238473 4079.1 72.6 4151.7 1.71 .03
Drilling - Footage Development - Footage			0
Ore Reserves End of Year (Prov Rock Tons (Including 45000 t Grade Zn Pb. % Concentrate Tons			681155 4.11 33217
Efficiency Tons Rock Mined Per Man Tons Concentrates Mined Per	Man		59.2 . 6 8
Costs - Operating Drilling & Dev. Cost** (Rock Total Rock Ton Total Concentrate Ton	Ton)		0 .453 26.00
Capital Expenditures During Year (Joplin Accounts Total at End of Year)		605.76 33 6829,45
Operating Profit & Misc. Income During Year (Joplin Accounts Total at End of Year	e (Including)	Inventory at	Cost) 21307.30 9091.41
Inventory End of Year (Tons) Zinc Concentrates Lead Concentrates Total Concentrates			0 0 0

Notes:- * No Mine Ore Handled. ** Included in Rock Ton and Concentrate Ton Cost.

RITZ UNIT - OKLAHOMA

The Ritz Unit includes 60 acres, the ores from which can be treated in one mill.

The Ritz Mill is a modern concentrating plant with a complete differential flotation unit. This mill has a capacity of 800 tons per 24 hours, also full equipment for the handling of 840 tons of tailings per 24 hours, giving a flexible arrangement of handling either mine run ore or tailings.

As a part of the general curtailment plan, the Ritz mines were closed in 1927, and during 1928 the mill treated tailings. About 840 tons of tailing ore per 24 hours (three shifts) were treated.

The tailings treated contains ore in a very finely disseminated form which requires fine grinding. During January finer crushing was resorted to and in May a large set of rolls were installed for this purpose. During January an extension was put on belt conveyor to convey the tailings into the mill. The speeds of the flotation machines were reduced in June and a conditioning tank for the flotation unit was added; all of which was paid for out of operations, and was compensated for by increase in tonnage handled in extraction, in grade of concentrates, and in a decrease in flotation cost. During July an extension was built on the tailing disposal conveyor. A St. Joe Classifier which has greatly improved our classification was installed in July. During September two additional float machines were added in order to treat fine slimes from old mill pond. This additional tonnage increased the grade of total tailings handled 20%. Xanthate, a patented flotation reagent was successfully replaced during the year by Areo Float and other reagents. Extraction was increased 2.4% the last six months over the first six months of the year and the grade of flotation concentrates was brought up to 60% grade.

These improvements increased revenue over \$2.00 per ton of flotation concentrates.

RITZ MINE #1

This mine is now in excellent condition and can be put on double shift operation on short notice.

RITZ MINE #2

This mine has fair possibilities for lead but requires development.

RITZ MINE #3

This mine has good possibilities for lead but requires development.

TAILINGS

During the year 238,473 tons were treated including approximately 4000 tons of sand. The average recovery was 1.71% zinc concentrates and .03% lead concentrates. Tailings yet to be milled should supply the mill with tonnage up to April or May, 1929.

ISHERWOOD UNIT - MISSOURI.

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The Following is a Summary of Operations at the Isherwood Unit During and at the End of 1928.

Isherwood Shaft No. 1	Ellis Shaft No. 5	Ellis Drift No.67	Total Ellis	Martin Shaft No. 1	Shaft Shaft	Shaft	Martin Drift No. 98	Total Martin	Banta Shaft No. 1	McKee Shaft No. 1	Total Isherwood Unit
1453 1448 118.7 0 112.7 7.78 0 7.78	2300	16918	.09	31214	23295 5	0	162	54676 50545 4251.4 0 4251.4 6.41 0 8.41	8525 7858 649.0 0 649.0 8.86 0	0 0 0 0 0 0	83670 77811 6757.0 15.9 6778.9 8.68 .08 8.70
695 11.0	580.5	. 28	9550 408.5	1760.5	472.0 52.0	46.0	0	15354 2330.5	1094 44.0	158 0	26823 2794.0
roved plus	Probab	10)					* :	· · · .			47040 6.94 3921
r Man	٠	:				,			•		3.7 .27
Ton) .304 2.517 32.43		÷	3.32					.453 2.380 30.08	.146 2. 253 28.50	0 0 0	.485 2.588 31.49
ts) 2173.29 198119.05					-			5494.20 55845.78	89740.36** 0	0 1475.75	26616.27 320831.89
come (Incl	uding I	nventor	y at Cost)						. •	
596.47 128072.55					•			24979.88 142982.39	10595.80 2715.74	189.20 1142.16	27899.25 459558.82
0 0			130 0 130					340 0 340			470 0 470
	Shaft No. 1 1453 1446 118.7 0 112.7 7.78 0 7.78 695 11.0 Proved plus Ton) .304 2.517 32.43 ts) 2173.29 198119.05 come (Incl. 396.47 128072.55	No. 1 No. 3 1453 2300 1448 118.7 0 112.7 7.78 0 7.78 695 11.0 380.5 Proved plus Probab Ton) .304 2.517 32.43 ts) 2173.29 198119.05 come (Including I 596.47 128072.55	Shaft Shaft Drift No. 1 No. 3 No. 67 1453	Shaft No. 1 No. 5 No.67 1453	Shaft No. 1 No. 5 No.67 No. 1 1453 2300 16918 19218 31214 1448 17960 118.7 1759.8 7.78 9.71 0 .09 7.78 9.80 695 11.0 380.5 28 408.5 1760.5 Proved plus Probable) Tan) .304 .732 2.517 3.323 35.88 Ats) 2173.29 4445.00 198119.05 65391.36 come (Including Inventory at Cost) 396.47 7943.70 128072.55 184645.98	Shaft Shaft Drift Ellis Shaft Shaft No. 1 No. 3 No. 57 1453	Shaft Shaft Drift Ellis Shaft Shaft Shaft No. 1 No. 3 No. 5 No. 4 1453 2300 16918 19218 31214 23295 5 0 1448 17960 113.7 1743.9 0 15.9 112.7 1759.8 7.78 9.80 695 9550 11.0 380.5 28 408.5 1760.5 472.0 52.0 46.0 Proved plus Probable) Ton) .304 .732 2.517 3.323 35.88 ts) 2173.29 4445.00 198119.05 65391.36 come (Including Inventory at Cost) 596.47 7943.70 128072.55 184645.98) 0 130 0 0	Shart Shart Drift Filis Shaft Shaft Shaft Drift No. 1 No. 8 No. 67 No. 1 No. 1 No. 2 No. 3 No. 4 No. 98 1455 2300 16918 19218 31214 23295 5 0 162 1448 17960 118.7 1743.9 0 15.9 112.7 1759.8 7.78 9.71 0 .09 7.78 9.80 695 9550 11.0 580.5 28 408.5 1760.5 472.0 52.0 46.0 0 Troved plus Probable) Tr Man Ton) .304 .732 2.517 3.323 32.43 35.88 ts) 2173.29 4445.00 198119.05 65391.36 come (Including Inventory at Cost) 396.47 7943.70 128072.55 184645.98)) 0 130 0 0	Shart No. 1 Prift Ellis Shart No. 1 No. 3 No. 4 No. 98 1455 2300 16918 19218 31214 23295 5 0 162 54676 50545 118.7 1743.9 0 0 15.9 0 0 4251.4 0 0 118.7 1759.8 4251.4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Shart Shart Drift Filis Shart No. 1 No. 2 No. 3 No. 4 No. 98 Martin No. 1 No. 3 No. 67 No. 1 No. 2 No. 3 No. 4 No. 98 Martin No. 1 No. 1 No. 2 No. 3 No. 4 No. 98 Martin No. 1 No. 1 No. 2 No. 3 No. 4 No. 98 Martin No. 1 No. 1 No. 1 No. 2 No. 3 No. 4 No. 98 Martin No. 1 No. 1 No. 1 No. 2 No. 3 No. 4 No. 98 Martin No. 1 No. 1 No. 1 No. 2 No. 3 No. 4 No. 98 Martin No. 1 No. 1 No. 1 No. 2 No. 3 No. 4 No. 98 Martin No. 1 No. 1 No. 2 No. 3 No. 4 No. 98 Martin No. 1 No. 1 No. 1 No. 2 No. 3 No. 4 No. 98 Martin No. 1 No. 1 No. 2 No. 3 No. 4 No. 98 Martin No. 1 No. 1 No. 1 No. 2 No. 4 No. 98 Martin No. 1 No. 1 No. 2 No. 4 No. 98 Martin No. 1 No. 1 No. 2 No. 4 No. 98 Martin No. 1 No. 1 No. 2 No. 4 No. 98 Martin No. 1 No. 1 No. 2 No. 4 No. 98 Martin No. 1 No. 1 No. 2 No. 4 No. 98 Martin No. 1 No. 1 No. 2 No. 4 No. 98 Martin No. 1 No. 2 No. 4 No. 4 No. 98 Martin No. 1 No. 1 No. 2 No. 4 No. 4 No. 98 Martin No. 1 No. 1 No. 2 No. 4 No. 4 No. 98 Martin No. 1 No. 2 No. 4 No. 4 No. 98 Martin No. 1 No. 1 No. 2 No. 4 No. 4 No. 98 Martin No. 1 No. 1 No. 2 No. 4 No. 98 Martin No. 1 No. 1 No. 1 No. 2 No. 4 No. 98 Martin No. 1 No. 1 No. 2 No. 4 No. 98 Martin No. 1 No. 1 No. 2 No. 4 No. 98 Martin No. 1 No. 1 No. 2 No. 4 No. 98 Martin No. 1 No. 1 No. 2 No. 4 No. 98 Martin No. 1 No. 2 No. 4 No. 98 Martin No. 1 No. 2 No. 4 No. 98 Martin No. 1 No. 2 No. 4 No. 98 Martin No. 1 No. 2 No. 4 No. 98 Martin No. 1 No. 2 No. 4 No. 98 Martin No. 1 No. 2 No. 4 No. 98 Martin No. 1 No. 2 No. 4 No. 98 Martin No. 1 No. 1 No. 2 No. 4 No. 98 Martin No. 1 No. 1 No. 2 No. 4 No. 98 Martin No. 1 No. 1 No. 2 No. 4 No. 98 Martin No. 1 No. 1 No. 2 No. 4 No. 98 Martin No. 1 No. 1 No. 2 No. 4 No. 98 Martin No. 1 N	Shart Shart Drift Ellis Shart Shart Shart Shart Drift Martin Shart No. 1 No. 5 No. 67 No. 1 No. 1 No. 8 No. 5 No. 4 No. 98 No. 1 No.

Notes:- * Included in Rock Ton and Concentrate Ton Cost.

^{**} Includes \$23,250.21 written off to New York.

ISHERWOOD UNIT - MISSOURI

This unit includes the Isherwood, Ellis, Martin, Banta and McKee leases - an aggregate of 656.2 acres the ores from which by reason of special agreements, can be treated in one mill.

The Isherwood property has a modern 720 ton per 24 hour concentrating mill. Ore was supplied through the Isherwood Shaft #1, Ellis Drift #67, Ellis Shaft #3, Martin Shaft #1, Martin Shaft #2, and Banta Shaft #1. This mill operated one shift 6 days per week until the latter part of September, 5 days per week until middle of October and 4 and 5 days per week the remainder of the year.

During the year an additional settling pond was built.

ISHERWOOD MINE #1

A very small tonnage of ore was mined during the year. Only a small ore reserve is left in the mine which is near the mill and will probably be the last ore mined at the Isherwood Unit. Work was temporarily abandoned first part of September.

ELLIS MINE #67

This ore body joins the Isherwood on the North and all the ore is hoisted through the Isherwood #1 shaft. This mine has been the largest, richest and most profitable of any of the mines of the Isherwood Group. There is only a limited tonnage left to mine, all of which should be completed about March 1, 1929.

ELLIS MINE #3

This mine is located in the Southwest corner of the property. The shaft was sunk to develop and mine an ore pocket discovered by surface churn drilling. The shaft was started August 15th, and completed September 19 to a depth of 138 feet. Drifts were driven North and South to ore holes, and a fair tonnage of ore has been mined - apparently a part of the ore pocket extending on to the Martin land to the West.

From present indications it does not appear that there will be a very large tonnage mined at this mine and this shaft should be completed about February 1, 1929.

MARTIN MINE #1 & #2

A large tonnage of rich ore has been produced by these mines during the year. Development drifts to ore holes to the Northeast and Southeast of #1 shaft were driven and small ore pockets mined. A development drift driven West from an incline at #1 mine developed a good tonnage of rich ore which has materially increased the life of this shaft.

No. 2 mine was operated on a lower level when a small body of rich ore was mined. The ore was mined so near the shaft that it was necessary to remove the hopper and derrick Oct. 1, and all mining was completed Dec. 1 and mine abandoned. There remains only a limited tonnage of rich ore to be mined at Martin #1 & #2, which will be completed about April 1st, 1929.

MARTIN MINE #3

This small prospect shaft was sunk to develop a shallow ore body found by surface churn drilling. No commercial ore was found and the shaft was abandoned.

MARTIN MINE #4

This shaft was started during December to develop some upper ore and will be connected by a raise from #1 mine to enable us to mine all of the rich ore around #1 shaft, and hoist through this shaft.

MCKEE MINE

The McKee mine is a small pocket of ore, being connected by drift to Martin #1 & #2 mines, the ore being hoisted through these shafts. No mining was done during the year. There remains only a very limited ore tonnage to be mined, but with good indications of some lower ore which will be developed during the early part of 1929.

BANTA MINE #1

This mine is in extremely soft ground formation. A small ore pocket was developed by drifting to the Southwest of the shaft and mined during the first part of the year. The latter part of May the mine was abandoned and the pumps and all equipment removed to the Isherwood with the exception of the derrick and hopper.

MARTIN - McBEE

SUB - LEASE.

Žr.

MISCELLANEOUS

Sub - Leases.

MARTIN - McBEE SUB-LEASE

This lease consists of 20 acres of Martin land and 20 acres of McBee land. A 100 ton mill has been built on the Martin 20 acres where a shaft has been sunk 140° deep. This mill has operated very little during the year. One or two drills have been operating almost continuously since the mines and mill have ceased operations. They have a few ore holes on the McBee 20 acres some distance from their mine which they expect to drift to and mine.

	#594 20 Acres Martin	#448 20 Acres McBee	Total
Tons Concentrates Sold 1928 To Date	111.1	45.1	156.2
	2449.1	505.6	2954.7
Royalty to K. E. Inc. 1928 To Date	173.30 4775.38	67.03 891.79	240.33 5667.17
Lease Expense (Approx.) 1928 To Date	0	105.00	105.00
	6690.00	1585.00	8275.00
Balance (Approximate) 1928 To Date	173.30	37.97	135.33
	1914.62	693.21	2607.83

MISCELLANEOUS SUB-LEASES OR CONTRACTS

During the year we made several contracts to clean up odds and ends at several scattered locations.

Dardenne Lease #922

Hand jig operated by contractor to clean out old elevator pits and around old concentrate bin. The contractor receiving 50% and Kansas Explorations, Inc. 50%.

Ellis Lease #494

"Gougers" mined out small pocket of lead near the surface, exposed when ground caved. Contractor received 75% and paid 25%, (7½% Area X; 7½% landowner; and 10% Kansas Explorations, Inc.)

Stewart Lease #490

Sublesses agreed to sink shaft on lead shale hole drilled on lease #490 and pay 25%, (Landowner 7½%; Kansas Explorations, Inc. 17½%) A permit to Kansas Explorations, Inc., for subleasing was signed by owners of Area X Contract.

Summary

	Stewart Lease # 490	Ellis Lease # 494	Dardenne Lease # 922	Total
Tons Concentra	tes Sold			a'
1928	9.9	24.7	25.5	60.1
To Date	9.9	31.7	25.5	67.1
Royalty to K.	E. Inc.			
1928	146.42	184.96	518.33	849.71
To Date	146.42	241.43	518.33	906.18
Lease Expense	•			
1928	721.72	0	610.33	1332.05
To Date	6999.50*	0**	61518.58*	68518.08

Notes:- * Amount spent on Entire Lease.

^{**} Charged to "Operations".

EXPLORATIONS

LEASE HOLDINGS

Acreage Acquired:

The Company's leasing activities during the year 1928, have been confined entirely to acquiring a few leases near our Isherwood group of properties, for protection purposes. These leases are "working leases" upon which little or no work has been done since acquisition, all with due understanding with the landowner.

Acreage Abandoned:

With the exception of Foley lease #383 and Banta lease #586, abandonment of leases has concerned only outlying tracts that had been held over from previous years, and whose retention during those years was considered warranted by the conclusion that they contained the nucleus or central part of possible favorable areas.

The Foley lease #383 was abandoned because of our inability to obtain proper milling privileges and because of the fact that we did not discover an ore body of sufficient size to warrant the erection of a mill.

The Banta lease #586 was abandoned after the mine was completely worked out. It was definitely determined that the possibilities of finding other ore bodies in that area were too hazardous for further exploration.

Acreage Held:

We are now holding, in addition to operating leases, fair sized blocks of the most promising acreage in the Waco-Lawton, Smithfield and Oronogo Areas and one or two rental tracts of more or less speculative value around the border of the Picher District.

Summary of Leasing Activities:

. •	Original Block	1921-1927 Inclusive	1928	Total
Acquired	18,787.0	87,356.0	297.0	106,440.0
Abandoned		101,253.6	1021.0	102,274.6
Under Leas	e December	31, 1928		4,165.4

DRILLING

Classes of Drilling:

Continuing the practice of past years, the Company employed, in 1928, both "shale" and "deep" drilling. "Shale" drilling consists of preliminary or exploratory work in search of structural conditions favorable for the occurrence of ore in this field. Shallow holes are drilled to determine the presence and depth of shale, and the character of the rock immediately below. This drilling can be done or contracted, at prices ranging from 40 to 60 cents per foot.

Deep drilling is used to follow up the shale drilling, testing the deeper rocks in which the ore actually may be found. Also, in some localities where shale drilling is not indicative, deep drilling is used without preliminary shale work. The cost ranges from 75¢ per foot up to \$1.50 or more in exceptional cases.

Tendency of Drilling Program:

From 1921 to 1925, when much exploratory work was in progress, and but little operation under way, shale drilling equalled or exceeded deep drilling in total footage. Since 1925, with the gradual completion of a broad exploratory program and the increase in operations, shale drilling has decreased greatly and deep drilling has become predominant. Especially was this true during 1928. The total footage drilled in 1928 was less than half that for 1927.

Comparative footages for 1926-1928*

٠.	Shale	Deep	Total
1926	43,252	158,4031	201,655
1927	13,797	93,235	107,032
1928	2,363	40,890	43,253

Note:- * The above figures include drilling on Operating Leases, which drilling was charged direct into Operating Costs.

Operating and Exploration Drilling

Drilling is divided, for accounting purposes, into that on Operating Leases and that on Non-Operating Leases; Operating Leases being those leases producing or having at some time produced ore to the credit of Kansas Explorations, Inc. Non-Operating Leases are those held by rental or being drilled or developed up to the production stage.

Comparative Operating and Non-Operating Footages 1926-1928.

	Operating Leases*			Non-	Operating	Leases		
	Shale	Deep	Total	Shale	Deep	Total	Grand Total	
1926	653	54355	55008	42599	104048 1	146647 1	201655 1	
1927	3623	53081	56704	10174	40154	50328	107032	
1928	1177	31161	32338	1186	9729	10915	43253	

Note: * All drilling on Operating Leases charged direct into Operating costs.

Areas X and Y Drilling

Owing to certain contracts it is also necessary to distinguish between drilling within territory known as Area X and outside of these limits, classed as Area Y.

Comparative Footages in X and Y 1926-1928.

	Area X			Area Y		
	Shale	Deep	Total	Shale	Deep	Total
1926	29011	86303 1	115314 1	14241	72100	86341
1927	11512	67112	78624	2285	26123	28408
1928	2363	39839	42202	0	1051	1051

In conformity with weekly reports, the X and Y drilling for 1928 may be further sub-divided between operating and non-operating leases as follows:

Footage for 1928 segregated into X & Y. Operating* and Non-Operating.

Shale X Shale Y Deep X Deep Y Oper.Non-Oper. Oper.Non-Oper. Oper.Non-Oper. Oper.Non-Oper. 1177 1186 0 0 31161 8678 0 1051

Note: * All drilling on Operating Leases charged direct into Operating costs.

Cost of Drilling

The Company owns and operates on surface work, six churn drills and in addition has contracted some work at rates prevailing in the district. The cost account therefore, represents a balance between the cost of company drilling and contract drilling.

Comparative Costs of Drilling 1921-1928, incl.

Cost per foot

Shale	Drilling	Deep Drilling
\$	•44	\$1.1 2
	.4 82	1.12
	.4 82	1.19
	.516	1.14
		1.10
		1.11
1 .		1.042
	.409	.825
	Shale	.482 .482 .516 .56 .567 .577

The foregoing figures for 1928 include the cost of drilling by Company owned surface drills, of which there are six; and the various contract drills used. The Company owned rigs drilled a total of 1177 feet of shale holes and 31,636 feet of deep holes at a total cost of \$.38 for shale and \$.75 for deep work (including depreciation but excluding supervision). These figures compare very favorably with the average contract cost for similar work, of \$.431 for shale and \$1.117 for deep work.

In addition to the surface drills, the Company owns and operates as needed, one underground churn drill. During the year 1928 the underground churn drill completed a total of 1889 ft. of deep hole at a cost of \$1.87 per foot (including depreciation but excluding supervision). Inasmuch as there are no contractors in the field doing similar work we can make no comparison in costs.

Ore Holes

Results of drilling are represented roughly by ore holes. An ore hole is defined as one which for any seven consecutive feet will assay 3% or better metallic zinc. It is permissable to value lead at twice its assay, inasmuch as the price of lead generally averages a little more than twice that of zinc.

The percentage of ore holes for 1928 shows a marked decrease compared to previous years. This decrease is no doubt due to the more or less re-drilling of the areas which were previously drilled- the first drilling naturally being in the most likely locations.

This comparison is well shown below:

	1926	1927	1928
Operating Leases*			
Total deep holes drilled	222	272	199
Ore holes drilled	4 8	46	21
% Ore holes drilled	21.6	16.9	10.5
Non-Operating Leases			
Total deep holes drilled	432	145	46
Ore holes drilled	32	24	4
% Ore holes drilled	7.4	16.5	8.7
Grand Total			
Total deep holes drilled	654	417	245
Ore holes drilled	80	70	25
5 Ore holes drilled	12.2	16.7	10.2
Note: * All drilling on Operating Operating costs.	Leases		

LEASE DEVELOPMENT

HURLBUT LEASE NO. 495

This lease has a proved and probable rock tonnage of 357,410 and with a grade of 3.8% metallic zinc, or a proved and probable concentrate tonnage of 16,312.

Enough ore is proven on this property to justify the moving of the Isherwood, or some other already owned concentrating plant, to this lease at some future date.

DARDENNE LEASE NO. 922

This lease has a valuable tailing pile which could be milled at a profit even under present market conditions, and produce over 10,000 tons of zinc concentrates. In addition to the tailings reserve we have over 2,000 tons of zinc concentrates underground. This 40 acre lease is being held as a future reserve and will easily support a mill unit.

BUCKINCHAM NO.945 and BURKE NO.650 LEASES. ORONOGO

The Proved plus Probable ore reserve on these leases total 190,206 rock tons and 9689 zinc and lead concentrate tons. Only a small amount of drilling was done on these leases during 1928.

Other features aside from tonnage are not, unfortunately, so encouraging. Principal among these doubtful features is that somewhat intangible thing locally known as "the formation" which does not resemble that in typical mines which have generally proved profitable. The zinc is very dark colored, approaching the variety known as "Black Jack" and probably would yield rather a low grade concentrate. The flint is not "alive" and fresh-looking as is usually desirable. Moreover, the face indicated by drilling is low (about 10 ft.) and the grade rather low (about 4% Zn.) Most serious of all objections, probably, is the enormous quantity of water which the drilling seems to indicate. This may possibly be connected with the old Oronogo-Webb City mine fields and, if so, it would be necessary to de-water those areas, at least partially, in order to reach the ore.

On the other hand the remarkable regularity and definiteness of the ore run with an indicated length of possibly half a mile and a width of probably from 50 to 200 feet, are in its favor. It seems really to be a sort of blanket or semi-sheet ground deposit located, however, partly just above and partly just below the Grand Falls flint horizon, which is the normal sheet ground zone. The depth of the ore is about 230 feet.

Fortunately we have good terms on these leases for at least a few years, and caution probably is advisable in the matter of development. Should the old Oronogo sheet ground area ever be dewatered it would be an ideal time to develop this ore body.

SNAPP NO.571 and GUNNING NO.949 LEASES, ORONOGO

Very little drilling has been done in this area during 1928. To date the main ore body seems to be an irregular pocket at the end of a shale slumpage, and ore occurs both in and more especially just beneath the shale at a depth of about 150 feet, with some ore probably extending to 200 ft.

We count about 133,000 rock tons as Proved plus Probable on the basis of present drilling but believe there is a good chance to increase this materially either by extending the present ore body or by finding other pockets, or both.

The "formation" is believed good and the indicated grade of ore (4%) including a number of thin edge holes probably is less than may be expected in mining. Water is believed to be not unduly strong.

We have compact blocks of desirable acreage, on good terms, with milling privileges, around both this and the nearby Buckingham strike, and this locality is regarded as the Company's most promising site for a new operation.

CARTER LEASE NO. 592, WACO

No work was done on this lease during 1928. We have on this property an ore body estimated at not quite 20,000 rock tons and about 1,000 concentrate tons, with little chance for anything more. This ore is at the deep level of the Waco Camp which may also be a factor against it rather than in its favor, as the deep run does not always prove up well.

We can see no possibility of an operation on this lease and unless there should develop some unexpected opportunity to mill it elsewhere, possibly at the Hurlbut, it would seem advisable to try to dispose of this tract to some other Waco company more conveniently situated to handle it.

LAWTON AREA

We hold only two leases in this area. One of these leases is sublet to lead "gougers" who produced during the year 9.9 tons of lead concentrates giving Kansas Explorations, Inc., \$146.42 as Royalty. These leases more than likely will be abandoned during 1929.

ORE RESERVES

Classes of Reserves:

Proved Ore for 1928 is that ore more or less blocked out by drilling and mining, so that its actual location may be shown on a map and its face and grade computed approximately. This is the same usage as in previous reports.

Probable Ore for 1928 is used to designate that additional tonnage, above proved ore, which it is believed, a lease may reasonably be expected to produce, in the light of its past performance and the general history of its surroundings. This ore remains to be discovered by future drilling and mining and cannot be platted on a map.

The Computation of ore reserves is, at its best, a difficult matter, requiring both judgment and experience, and our practice is not yet standardized wholly to our satisfaction.

The Ore Reserves for 1928 are computed, with the exception of reserves from tailings, as follows:

Rock tons available times Sulphide mineral content times 80 per cent extraction equals tons concentrates available.

(Pillar loss compensated for in extra extraction and later actual recovery of the pillars).

ROCK TONS - OPERATING GROUPS BY LEASES.

LRASK Name	Number	Proved*	AT IEC. 31, 1927 Proved Plus Probable**	Proved Plus Probable Grade \$***	AS Proved*	AT IEC. 31, 1928 Proved Plus Probable**	Proved Plus Probable Grade \$***
Jarrett	596	146,751	386,751	4.68	147,361	294,761	4.28
Mullen	743	69,182	119,182	4.27	69,182	119,182	4.86
TOTAL JARRETT		215,933	505,933	4.54	216,543	413,943	4.87
ROBINSON	784	152,071	277,071	5.45	86,477	512,677 `	5.78
RITZ	921	348,155	592,155	4.70	342,155	636,155	4.86
Isherwood	603	5,865	9,865	8.15	3,125	6,185	8.00
Ellis	494	18,300	18,300	8.65	2,100	8.800	4.26
Martin	594	51,563	71,563	6.89	9,530	15,830	5.60
McKee	929	400	400	6.00	666	666	8.00
MoBee	448	4,840	19,840	7.50	7,819	21.619	7.70
TOTAL ISHERWOOD	440	80,968	119,968	7.36	83,840	47,040	6.94
TOTAL OPERATING	٠	791,127	1,495,187	4.99	668,415	1,410,015	4.88
		: RO	OK TONS NON-C	PERATING LEASES			
Hurlbut	495	50,100	100,100	4.58	78,710	357,410 -	3.8
Dardenne	928	15,923	35,923	5.71	15,923	35,985	5.71
Carter	598	15,626	18,686	5.44	13,626	18,626	B.44
Stewart	490	505	. 505	4.36	298	298	4.56
Roth	954	,	000	1,00	2,187	4,187	5.03
Buckingham	945	46,091	136,091	4.18	44,906	134,906	4.18
Burke	650	22,900	48,900	4.38	28,900	55,300	4.59
	571						4.07
Snapp		86,270	96,270	4.30	86,270	113,100	
Gunning	949	10,986	50,986	4.06	10,986	20,086	3.54
TOTAL BUCKINGHAM		166,247	306,247	4.19	165,062	523,592	4.14
TOTAL NON-OPERATIO	7G	846,401	461,401	4.44	275,806	759,836	4.09
•			ROCK TONS IN TA	ILINGS			
Ritz	921	250,511	250,511	5.14	45,000	45,000	2.05
Dardenne	. 922	651,200	651,200	2.84	651,200	651,200	2.84
TOTAL		901,511	901,511	8.49	696,200	696,800	8.80
•		· R	OOK TONS ABAN	DONED LEASES		•	
TOTAL		184,268	176,268	4.53			
GRAND TOTAL		8,063,307	3,034,307	4.14	1,640,481	8,846,051	5.6

^{**}Proved" means ore actually blocked out by drilling and mining.

*** "Probable" means ore reasonably expected but which cannot be actually blocked out.

*** "Grade \$" means metallic assay per rock ton.

These definitions apply on these sheets wherever the terms are used.

ORE RESERVES SUMMARY 1927-1928.

TONS CONCENTRATES -- OPERATING GROUPS BY LEASES

			•		
		AS AT DEC. 3	1, 1927	. AS AT DEC.	31, 1928
Lease		Proved*	Proved	Proved*	Proved
Name	No.		Plus	•	Plus
•			Probable**		Probable**
Jarrett	39 6	5,857	17,857	6,908 (1)	15,180
Mullen	743	3,099	5,099	3,711	6,111
TOTAL JARRETT		8,956	22, 956	10,619	21, 291
ROBINSON	724	8,850	15,100	5,151 (2)	13,876
D. T. 1977	003	30 540	90 700	10 074 /71	EO 474
RITZ	921	16,549	27,799	18,874 (3)	52,434
Isherwood	603	484	804	300	588
Ellis	494	1,581	1,581	110	146
Martin	594	3,529	4,929	686	1,086
	929	2,329 24	2, 525	64	64
McKee				711	
McBee	448	43 9	1,489		2,037
TOTAL ISHERWOO	עי	6,057	8,827	1,871	3,921
TOTAL OPERATIN	rc.	40,412	74,682	5 6,515	71,522
Note: Includes					
70 00 1 770 7 440 5	2044 002	0020200	.5 . 4.5 . 1.02.20		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
	TONS C	ONCENTRATES	- NON-OPERA	TING LEASES)
Hurlbut	495	2,272	4,522	3,912	16,312
Dardenne	922	1,050	2,050	1,255	2,4 55
Carter	592	763	1,013	916	1,215
Stewart	490	22	22	13	13
Roth	954			133	2 53
	•		5 440		•
Buckingham	945	2,008	5,608	2,341 (4)	6,671
Burke	650	1,050	1,850	1,260	3,018
Snapp	571	3,739	4,139	4,292 (5)	5,492
Gunning	949	457	1,257	527 (6)	855
TOTAL BUCKINGS	AM	7,254	12,854	8,4 20	16,036
MODAT MOMENT	AMTMO	11 861	90 461 -	14 640	78 90A
TOTAL NON-OPER Note: Includes		11,361	20,461	14,649 s:(4)83.(5)	36,284 901,(6) 104
Mote: Includes	Tead. com	Senerate con	s de lottom	8: (4) 60, (0)	BOI, (0) 104
	TONS	S CONCENTRAT	ES IN TAILI	ngs	
Ritz	921	7,851	7,851	783 (7)	783
Dardenne	922	14,583	14,583	14,583	14,583
TOTAL		22,434	22,434	15,366	15,366
Note: Includes	lead cor	ncentrate to	ns as follow	ws: (7) 14	
ŕ	TONS	S CONCENTRAT	ES - ABANDO	NED LEASES	
TOTAL ABANDONE	D	5,810	7,970		•
GRAND TOTAL	•	80,017	125,547	66,530 (8)	123,172
Note: Includes	lead cor				1

Notes: * "Proved" means concentrates actually blocked out by drilling and mining.

^{** &}quot;Probable" means concentrates reasonably expected but which cannot be actually blocked out.

These definitions apply on sheets wherever the terms are used.

GENERAL

GENERAL EXPENDITURES

	l 9 2 Expendit Amount	ures	Transferred To New York	As at D	
Lease Prospecting Exp.	0 `.	. 0	25408.08	376057.09	21.06
Deep Drilling Area X	6803.73	.97	44495.11	60983.89	3.42
Deep Drilling Area Y	1185.25	.17	0	12798.00	.72
Shale Drilling Area X	877.85	.12	8384.23	18110.60	1.01
Shale Drilling Area Y	0	. 0	, 0	1307.00	.07
Lease Acquisition	0	. 0	360.79	615.43	• 03
Lease Rentals	3942.50	•56	3480.00	15439.67	.87
Legal Expense	1968.65	.2 8	898.09	3296.79	.18
Bonuses	. 0	0	0	55000.00	3.08
General Expense Explor.		2. 53	7531.86	2 8057 . 30	1.57
Taxes Explorations	257.31	.03	1.50	353.65	.02
Electrical Prospecting	0	0	0	507.79	.03
Total Lease Expense	52821.31	4.66	90559.66	572527.21	32.06
Mine Descionment	2612.19		FORO O OC	45.4000 CO	OF 44
Mine Development Mine Plant	1336.96	.37 .19	30709.86	454673.82	25.46
Cash Accounts	1330.90	0	20368,59	730855.09 3221.59	40.93
Accounts Receivable	7359.36	1.05	0	9410.41	.18 .53
Notes Receivable	131.85	.03	0		
Warehouse Accounts	22.32	0	Ö	1000.00	.06
Drill & Comp. Equip.	3085.07	•44	0	885.13	.05 .42
Meter Deposit	15.00	0	0	7519.68 27.00	0
Advances	239.97	. 0 3	Ö	27.00	0
Emp. Ins. Prem. Prepaid		.01	0	993.31	•05
F. & T. Ins. Prepaid	3.86	0	ŏ	4623.10	.26
Mining & Milling Exp.	496717.49	70.60	496717.49	-0	0
Royalties	132849.47	18.88	132849.47	Ö	ŏ
General Expense Oper.	38165.00	5.42	38165.00	· ŏ	ŏ
Taxes Operations	3159.37	.45	3159.37	Ö	ŏ
TOTALS	703580.68	100.00	812529.44	1785736.34	100.00

We had a credit balance of \$34,811.66 in our Liability Insurance Reserve at the close of the year - which showed a reduction of \$960.42 in this account during the year. This reduction was due to an expenditure of \$11,332.03 during 1928, on account of accidents occurring prior to 1/1/28. Considering the year 1928 alone there was a gain in this account of \$6,261.61 after providing reserve for estimated balance of liability in connection with 1928 cases unsettled at 12/31/28.

During the year we discontinued our arrangement with O. M. Spratt. Adjuster and the Safety and Adjustment was handled in our own organization. A notable improvement in attitude, partially due to a system which was started at nominal cost to create a co-operative spirit among the men to the end of reducing accidents to the minimum, resulted in much improvement in this Department. A brief summary for 1928 follows:

Shifts Worked	56,685	Cost per shift	.177
Tons Rock	422,210	Cost per ton rock	.024
Tons Conc.	18,066	Cost per ton conc.	•557

Reserve: - Based on Manual Rates

\$16,331.31

Cost:-

Actual Expenditures

Compensation, Medical,

Hospital, etc.

Adjusters Salary, Legal,

etc.

Prizes for Accident

Prevention 1468.81 5959.70

Estimated Liability for 1928 cases unsettled at 12/31/28:

Compensation, Medical,

Hospital, etc.

E. Proctor (Fatal)

Specific Amount

Glen Rowe (Serious neck

& back injury)

3760.00

2595.89

1895.00

350.00 4110.00

Total Cost

10,069.70

Balance

6,261.61

At the close of the year we were involved in no legal suits in connection with Workmen's Compensation matters.

The only lawsuit pending at the close of 1928 in which the Company is involved is as follows:

BLANKENSHIP vs KANSAS EXPLORATIONS, INC. this is a suit to recover alleged damages to the mill
property of plaintiff caused by running sludge into the
mill pend of plaintiff. The suit was tried in the
Circuit Court of Jasper County and judgment for \$10,000.00
was rendered in favor of plaintiff. The case has been
appealed, on behalf of the defendant, to the Supreme
Court of Missouri and is now pending in that court. This
case will probably be set for hearing during the latter
part of 1929.

Accounts Receivable and Notes Receivable on our books at the close of the year showed a balance, respectively, of \$9,110.41 and \$1,000.00.

At the close of the year Current Liabilities were as follows:

Accounts Payable	2.50
Royalty Accrued	6308.20
Taxes	1081.84
Vouchers Payable	22244.53
Labor Accrued	2736.35
Special Liability Reserve	180.00
(For Tax to Mo. State Ins. Dept.)	

Total \$32553.42

Operating Income for the year, other than that from concentrate sales, consisted from following:-

Discount	Earned	•	1065.30
Royalty			1090.04
Interest			114.05

Total \$2269.39

At the beginning of 1928 we had in bins 5,120 tons of unsold zinc concentrates, produced when base market averaged about \$36.00, and which included 2,640 tons of high grade lead-free zinc at our Isherwood plant. At the close of the year this inventory was reduced to a total of 1,830 tons of unsold zinc concentrates, including only 470 tons of high grade lead-free. Lead concentrates, generally were sold currently as produced on base market ranging from \$72.50 to \$85.00. Early in the year production of zinc in the district reached a basis considerably in excess of smelter requirements and a district stock of unsold zinc of around 70,000 tons accumulated. This, combined with other factors, created a "buyers' market" which obtained during most of the year. It was decided to sell weekly, regardless of market prices, a tonnage sufficiently in excess of production to reduce our inventory very materially. In order to move this tonnage under the existing market conditions it was necessary to separate milled and flotation concentrates at Robinson and Ritz - the milled concentrates going at Prime Western base and the flotation at \$3.00 class penalty. Previously we had been able to market this mixed ore at Prime Western base. Also to move the required tonnage it became necessary to sell a considerable tonnage of our high grade lead-free concentrates, which formerly brought \$2.00 to \$4.50 class premium, at Prime Western base. Recently we have developed a satisfactory market for this class of zinc concentrates.

Notwithstanding adverse conditions under which it was necessary to reduce our zinc concentrate inventory, a gross market value approximately \$10,000.00 in excess of value at market as produced was realized on this 3290 tons. The following table shows tonnages of zinc concentrates marketed by months:

	Tons	Tons	Sales in	Joplin
	Produced	Sold	Excess of	Base
			Production	
January	1325.4	646.0	679.4	36.00
February	1430.4	2129.4	699.0	36.00
March	1804.8	2050.8	246.0	38.00
April	1714.0	1846.4	132.4	38.00
May	1486.1	933.1	553.0	39.50
June	1379.1	909.1	470.0	40.00
July	1121.9	961.9	160.0	40.00
August	1313.6	1762.6	449.0	40.00
September	1463.6	1931.3	467.7	40.00
October	1569.3	1587.6	18.3	40.00
November	1306.7	2936.7	1630.0	40.00
December	1204.1	2714.1	1510.0	40.00
Total	17119.0	20409.0	3290.0	

During the year we shipped high grade leadfree zinc concentrates to Herculaneum, as follows:

Where	Dry	Pounds	Gross
Produced	To ns	Metal	Value
Ellis	120.2	148,090	4805.52
Martin		187,330	6261.74
Total	270.5	335,429	\$11067.26

No lead concentrates were purchased during the year.

Comparison of Drafts and Remittances during the past four years, follows:-

	1925	1926	1 9 2 7	1928
Drafts Remittances	1376852.32 980939.36	1820031.62 1681340.14	1352912.55 1136141.05	655058.80 811551.20
Balance	\$ 395912.96	\$ 138691.48	\$ 216771.50	\$156492.40

During 1925, 1926 and 1927 over \$500,000.00 was spent in completing the Exploration campaign originally planned.

During these years the Ritz, Robinson and Dardenne properties were acquired. The Ritz, Isherwood and Robinson Mills were built and the Jarrett Mill greatly improved (flotation unit added) and the property developed to a profit-base. The ore bodies on the Ellis, Martin, Banta, McBee, Hurlbut, Robinson, Ritz, Dardenne, Snapp and Buckingham were all developed during these years. This period therefore represents an accumulation of the major part of our assets.

SUGGESTED PLANS

FOR THE YEAR

1 9 2 9

SUGGESTED PLANS FOR THE YEAR 1929

Operations & Exploration

Kansas Explorations, Inc., properties are in excellent physicial condition and could produce over 40,000 tons of lead and zinc during 1929. The only property showing weakness is the Isherwood Unit, which will be completed during 1929. The Dardenne and Hurlbut leases are ready for a mill and the Snapp and Buckingham Area has an excellent showing, but will require further development.

The Company, then, begins the year 1929 with following possible sources of production:

Over a 12 Months Period .

Jarrett - Can produce over 10,000 tons zinc concentrates. Robinson- Can produce over 10,000 tons zinc & lead concentrates.

Ritz - Can produce over 10,000 tons zinc & lead concentrates.

Isherwood- Can produce over 5,000 tons zinc concentrates. Total 35,000 tons.

Hurlbut - Waiting for mill with an annual 6,000 zinc concentrate ton capacity.

Dardenne - Waiting for mill with an annual 6,000 zinc concentrate ton capacity.

Snapp Area - Requiring further development.

Due to the present very low ore market it is more than likely that the present curtailment program will continue up to possibly April. However, increases in ore prices are likely and increased production should follow.

Explorations for 1929 will be very limited as the enormous drilling campaign originally planned was practically completed during 1927.

Jarrett Property - Kansas

During 1929 this property could produce over 10,000 tons of lead and zinc concentrates, and more than likely this production would be premium zinc concentrates. The bulk of this tonnage would be mined from Jarrett #2 and #3 shafts with possibly a clean-up of the upper level ore at #1 mine. No tonnage would come from the Mullen lease, though if ore prices would justify, the Mullen shaft might advisedly be sunk to test out the deep run of ore.

The Jarrett property is in excellent condition, and could produce a large tonnage of high grade ore cheaply and on short notice. This property should be started when the Isherwood property becomes unprofitable, provided ore prices show improvement.

Robinson Property - Kansas

During 1929 this property could produce over 10,000 tons of lead and zinc concentrates. Most of this tonnage would come from #3 and #4 shafts. The deeper development at #3 mine should prove a profitable area. New territory immediately North and a little West of #2 shaft may be developed during the year. The area East of #4 and the area West of #5 mines should later develop commercial ore.

The Robinson is in excellent condition physically to produce both tonnage and grade at a cost cheaper than the past average.

Ritz Property - Oklahoma

During 1929 this property could produce possibly 10,000 tons of zinc and lead concentrates from the mine ore, and the milling of old tailings will be completed about April 1929. The underground ore would come mainly from \$1 \text{ shaft though a fair percentage of lead ore will come from \$2 \text{ and \$3 \text{ shafts, should it develop according to drill holes.}

This property unfortunately was opened up at the beginning of the low zinc market which caused us to mine only the lower grade ores and hold in reserve the high grade ore. With a fair zinc market this property is in excellent condition to make a good showing.

Isherwood Property - Missouri

During 1929 this property will produce possibly 5,000 tons of concentrates. Most of this tonnage would come from the Martin, Isherwood and McBee leases. It now appears that during 1929 these properties will be mined out unless new unexpected ore bodies are discovered. Should ore prices then justify, this mill should be moved to the Hurlbut.

EXPLORATIONS

Hurlbut Lease No. 495

During 1929 this property could be put into production but it is planned to pay approximately \$1100.00 yearly rental and hold this ore for the future. The Isherwood Mill will possibly be moved to this lease in due time.

Dardenne Lease No. 922

During 1929 this property could be put into profitable production but for the moment is being held as a reserve sufficient for a complete mining and milling plant.

Buckingham - Oronogo

The Buckingham Lease No. 945 together with the following leases, have a combined milling right permitting any or all of them to be milled over one mill. There has been a fair tonnage of ore blocked and we feel confident of developing this area into another milling unit. One drill should be kept in this area:

Snapp Lease	No.	571
Gunning Lease	No.	949
Stevison Lease	No.	951
Broughton Lease	No.	946
Gunning Lease	No.	948
McReynolds Lease	No.	947
Burke Lease	No.	650
Poundstone Lease		952
Crosby Lease	No.	

Other Miscellaneous Leases

During 1929 the few remaining leases not mentioned above, will possibly be sold, abandoned or assigned.

Acquisition of New Properties

During 1929 we may have opportunity to secure known ore reserves. The Company has an organization which is well acquainted with the entire field and is in an excellent position to take full advantage of acquiring, developing or operating any favorable leases that may be offered.

Drilling

During 1929 there should be practically no wildcat drilling. Drilling in 1929 will possibly be confined to known productive properties.

General

This Company is now in a position to hold its own with any of the other organizations of the Tri-State District. The properties of the Kansas Explorations, Inc., are in such a physical condition that 1929 could be the most efficient year, both as to production and costs in the Company's history.

The year 1929 starts out with \$40.00 zinc concentrates (60% Zn.) and \$85.00 lead concentrates (80% Pb.). Indications point to considerable market improvement during the year.